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MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
UNITED STATES DEPARTMENT OF AGRICULTURE

Number 166

February, 1928

TROPICAL AND SUBTROPICAL PLANT INSECT INVESTIGATIONS

A. C. Baker, Senior Entomologist, in Charge

From James Zetek, in charge of the field laboratory at Ancon, Canal Zone, it is learned that on February 1 T. H. C. Taylor, Entomologist to the Department of Agriculture of Fiji, arrived in the Canal Zone on a journey from Trinidad, and was a visitor at the field laboratory until his departure on February 3 for the Fiji Islands. He brought with him a large shipment of cages containing young coconut palms heavily infested with the scale insect Aspidiotus destructor, and at least five species of ladybird beetles. This scale insect is particularly troublesome in Fiji, and Mr. Taylor believes that at least two of these ladybird beetles will prove very efficient in controlling it. The Levuana moth, also a serious pest of the coconut in Fiji, is now under complete control by parasites introduced by Mr. Taylor.

C. F. Doucette, in charge of the field laboratory at Puyallup, Wash., spent the interval from the early part of December to about the end of January working up the results of the experiments conducted by him during the last season on the fumigation and hot-water treatment of narcissi for the control of narcissus bulb flies. This was done at the field laboratory at Santa Cruz, Calif., in cooperation with Dr. F. R. Cole, in charge of that laboratory.

At the invitation of the California State Department of Agriculture, Mr. Doucette while in California accompanied E. L. Smith, superintendent of nurseries in that State, in a survey of the bulb-producing areas in the vicinity of Los Angeles and San Diego. He also conferred with the county horticultural commissioners in that region on the insect problems of the various bulbous and ornamental crops grown there.

Dr. Baker spent the most of February in the Lower Rio Grande Valley of Texas, looking over the work on the control and eradication of the Mexican fruit worm and arranging for a permanent organization to handle the control features for which money was provided in the first Deficiency Bill of 1928. Late in February he went into Mexico, accompanied by Dr. C. I. Bliss and Mr. M. McPhail, to locate and arrange for the establishment of a laboratory to conduct research work on the Mexican fruit worm.

STORED-PRODUCT INSECT INVESTIGATIONS

E. A. Back, Senior Entomologist, in Charge

Mr. Rechad, who has been employed as a technical agricultural adviser to the Turkish Ministry of Agriculture, and is connected with the Agricultural Experiment Station at Bournabat (Smyrna), sailed from Naples for New York on February 8. He intends, after conferences in Washington, to make an investigation of the dried-fruit industry in California and Australia. According to the American Consul at Smyrna, the coming of Mr. Rechad is "An evidence of the serious concern caused locally by the additional restrictions being imposed by the United States upon dried-fruit imports and the rigid sanitary control being exercised by the Consulate. In both business and governmental circles apprehension is felt as to the future of the local dried-fruit industry in view of these restrictions, and every effort is being made to meet the requirements of the Department of Agriculture so as to insure the admission of Turkish products." Importers of Turkish or Smyrna figs are having difficulty in reducing the insect tolerance to that permitted by law.

According to a new Stanislaus County, Calif., ordinance, effective April 15, all bean straw and stored beans must be destroyed or treated. A survey of the Turlock district was begun February 17 to locate such stocks as are likely to become sources of infestation for the 1928 crop. This work is in charge of C. R. Pearl, County Horticultural Inspector, A. O. Larson of the Bureau of Entomology, and Henry Sylvester of the County Farm Bureau.

Dr. H. G. Knight, Chief of the Bureau of Chemistry and Soils, arrived in Fresno February 25. At the request of E. M. Chase, in charge of the Fruit and Vegetable Laboratory at Los Angeles, Perez Simmons, in charge of the field laboratory at Fresno, assisted Dr. Knight in getting an insight into the dried-fruit industry as it is being conducted in and about Fresno.

Miss Marion T. Van Horn, Junior Scientific Aid, was burned out of house and home on February 25, when fire totally destroyed the building in which she was living. Owing to the rapidity with which the fire spread, Miss Van Horn lost all her more precious possessions in the form of heirlooms. Neighbors aided in removing some of the furniture from the ground floor. Unfortunately, the books and insects belonging to J. C. Bridwell, formerly of this Division, which he had left in an upstairs room, were all lost, with the exception of a collection of bruchids loaned for study by the Mysore State and the Madras Presidency. All of this bruchid material appears to have been saved through Miss Van Horn's presence of mind.

The Furniture Manufacturer for January carries an article by Back and Cotton, entitled "How cotton batting prevents moth damage." This article is illustrated with 21 photographs showing injury caused by moths to upholstered furniture. One thousand separates have been presented to the Bureau of Entomology for use in correspondence.

On February 14 Dr. Back gave an illustrated talk before the second class at the National Cleaners and Dyers Institute, Silver Spring, Md. This class of young men numbers sixty-eight, representing about thirty-five States of the Union.

S. E. McClendon, in charge of the field laboratory at Thomasville, Ga., reports that very promising results have been secured with tests of chloropicrin as a corncrib fumigant.

R. R. Rau, Secretary of the National Retail Furniture Association, visited the Bureau on February 20.

GIPSY MOTH AND BROWN-TAIL MOTH INVESTIGATIONS

A. F. Burgess, Senior Entomologist, in Charge

A. F. Burgess spent the first week of February in Washington, conferring with Bureau officials.

In the week of February 20 J. V. Schaffner, jr., spent several days at the United States National Museum, at Washington, comparing lepidopterous specimens reared at the gipsy moth laboratory with those in the Museum collections. His studies in Washington were suddenly interrupted by an attack of appendicitis, necessitating his immediate return home. He is now convalescing after a successful operation.

P. B. Dowden was in Washington during the week of February 20, completing arrangements for foreign parasite work. He sailed from New York February 29 on the S. S. George Washington. Mr. Dowden will visit several entomologists and the U. S. Corn Borer Laboratory at Hyères, France, before proceeding to the gipsy moth laboratory at Budapest. While in Europe he will be associated with C. F. W. Muesebeck and R. C. Brown, at Budapest. Mr. Muesebeck expects to return to Melrose at the close of the summer's parasite work, and Mr. Dowden will remain in Europe to continue these investigations and the shipment to the United States of the beneficial species.

C. P. Clausen, of the Japanese Beetle Investigations, was a recent visitor at the gipsy moth office and laboratory at Melrose Highlands.

Alejandro de Mesa, of the Bureau of Forestry, Department of Agriculture, Guagua, Pampanza, Phillippine Islands, spent February 23 and part of the 24th at the gipsy moth office and laboratory at Melrose Highlands. He has recently finished studies on forest entomology at Cornell University, and will visit several entomological stations in the United States before he returns to the Philippine Islands.

TAXONOMIC INVESTIGATIONS

S. A. Rohwer, Senior Entomologist, in Charge

H. S. Schwarz, of the American Museum of Natural History, New York City, visited the Division of Insects on February 9 and studied anthidiine bees in the collection.

M. C. Van Duzee, of Buffalo, N. Y., visited the U. S. National Museum on February 13 and 14, bringing back some flies from tropical America, on which he has been preparing a paper for publication. While here he arranged to do some further work on Museum material.

T. H. Hubbell, of the University of Michigan, spent February 13 and 14 with Mr. Caudell, studying material of the orthopterous genus *Ceuthophilus*.

Dr. W. J. Holland, of Pittsburgh, Pa., visited Dr. Schaus on February 11.

C. C. Hill of the Carlisle, Pa., field laboratory of the Bureau of Entomology, was a visitor to the Division on February 29 and conferred with Mr. Gahan about parasites of the Hessian fly.

On February 29 C. M. Packard, of the Bureau field laboratory at Lafayette, Ind., called on several of the specialists in the Division of Insects.

P. B. Dowden, of the Gipsy Moth Laboratory, visited the Division on February 29, when he discussed parasite work with Mr. Gahan and Dr. Aldrich.

Word has been received from R. A. Cushman that the packing of the Baker collection, in the Philippine Islands, has been completed and that the boxes have been conveyed from Los Banos to Manila by barge and tug furnished by the Quartermaster's Department. On February 15 Mr. Cushman sailed with the collection on board the Transport Thomas, bound for San Francisco. On arrival there, the boxes containing the collection will be transhipped to New York via the Panama Canal. Mr. Cushman is expected to arrive in Washington some time in March.

INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, Senior Entomologist, in Charge

Dr. L. O. Howard and F. C. Bishopp attended the fifteenth annual meeting of the New Jersey Anti-Mosquito Association, held at Atlantic City February 15 to 17, and Dr. Howard read a paper entitled "World-wide mosquito work during 1927."

FOREST INSECT INVESTIGATIONS

F. C. Craighead, Senior Entomologist, in Charge

Early in February Dr. S. A. Graham, in charge of the field laboratory at St. Paul, Minn., spent several days in Washington, conferring with Dr. Craighead on the forest-insect work for the coming season in the Lake States.

H. J. MacAloney, in charge of the forest-insect work at the Northeastern Forest Experiment Station, Amherst, Mass., spent several days in Washington early in February going over plans for the work in this section during the approaching field season.

J. M. Miller, of Palo Alto, Calif. and J. C. Evenden, of Coeur d'Alene, Idaho, reported at Washington, D. C., on February 28, to outline plans for the coming summer's work and to confer with the Office of Forest Management of the Forest Service on cooperative control projects. Both of these men while on their way east attended the annual meeting of the Western Forestry and Conservation Association at Tacoma, Wash. Forest insects became a live issue on the program.

F. P. Jepson, Assistant Entomologist, Department of Agriculture, Peradeniya, Ceylon, made a special trip from England in the latter part of January to consult with Dr. Snyder in regard to controlling termites attacking tea bushes and the woodwork of buildings in Ceylon. Certain species of termites in the genus *Kaloterme*s are primary pests of the tea bushes, and are doing extensive damage. Mr. Jepson returned to England in the first week in February.

DECIDUOUS-FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Associate Chief of Bureau, in Charge

On February 4 Oliver I. Snapp gave an address on peach insects at the Mississippi A. & M. College for the benefit of biological workers and students interested in entomology at that institution. He also attended the meetings of the Cotton States Entomologists in Memphis, Tenn., on February 1 and 2, where he discussed developments in peach-insect investigations during 1927.

Among recent visitors at the Peach Insect Laboratory, Fort Valley, Ga., were G. F. Moznette, of the Albany, Ga., pecan insect laboratory, and W. A. Thomas, of the truck-crop insect field laboratory at Chadbourn, N. C.

R. W. Hodgson, of the Horticultural Department of the University of California, visited H. S. Adair at the Brownwood, Tex., pecan insect laboratory February 28. Mr. Hodgson's call was in connection with his interest in pecan culture in California.

COTTON-INSECT INVESTIGATIONS

B. R. Coad, Entomologist, in Charge

B. R. Coad, Dr. J. W. Folsom, Dr. W. V. King, R. C. Gaines, K. P. Ewing, and Dr. F. A. Fenton, of the Tallulah laboratory, attended the meetings of the Southern Agricultural Workers at Memphis on February 1 and 2.

B. R. Coad, R. C. Gaines, and A. J. Chapman left Tallulah February 21 for points in Texas and Arizona. Mr. Coad will be in the Southwest probably for the next five or six weeks. The principal points will be visited where work is under way on the pink bollworm, the Arizona weevil, and the cotton leaf perforator.

Dr. F. A. Fenton left Tallulah on February 4, returning to El Paso, Tex., to continue his investigations of the pink bollworm.

A. J. Chapman, who has been in Arizona for the past two years, engaged in scouting and other investigation of the *Thurberia* weevil, spent two weeks at Tallulah in February in conference with B. R. Coad and other members of the laboratory staff.

V. V. Williams, of the Tallulah laboratory, who for the past two years has been investigating the cotton leaf perforator, *Bucculatrix thurberiella*, in the vicinity of Calexico, Calif., spent the greater part of February at Tallulah working up reports.

F. H. Tucker, of the Tallulah laboratory, spent February 17 to 29 in Washington, consulting literature and conferring with Dr. C. H. Richardson and members of the staff of the Bureau of Chemistry and Soils regarding insecticides. Mr. Tucker is especially concerned with the insecticidal action of sulphur on the cotton flea hopper and other cotton insects.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, Senior Entomologist, in Charge

B. L. Boyden, Associate Entomologist, formerly in charge of the sweet-potato weevil work in Florida, and who has been employed by this division in various assignments since 1914, has been transferred to the Federal Horticultural Board, effective Feb. 1, 1928, to take charge of the work on eradication of the date scale at Indio, Calif. Mr. Boyden's selection for this difficult assignment was a recognition of the very effective work conducted under his direction in connection with the sweet potato weevil in Florida.

S. E. Crumb returned to Clarksville, Tenn., Feb. 3, after consulting with Museum specialists and others in Washington regarding his investigations on tobacco insects.

K. B. McKinney returned to Clarksville, Tenn., Feb. 16, from a temporary assignment with the Federal Horticultural Board, and left Clarksville, Feb. 20, for Tempe, Ariz., where he will inaugurate investigations on the tobacco stalk borer.

W. A. Thomas, of Chadbourn, N. C., returned to that place February 23, after a visit to Green Cove Springs, Fla., to investigate a reported outbreak of the mole cricket.

O. T. Deen has been transferred from Picayune to Biloxi, Miss., effective February 20.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. H. Larrimer, Senior Entomologist, in Charge

J. W. Ingram, in charge of the sublaboratory at Crowley, La., spent a few days in February at the New Orleans field laboratory.

Early in February F. W. Boyd, of the field laboratory at San Antonio, Tex., made a trip through northern Texas to study the effects of the extremely cold weather on greenbugs. He reports that they continue to be abundant near Wichita Falls and in the neighborhood of Denton. So far as he was able to find, the cold weather has had no effect on them.

D. J. Caffrey spent February 3 to 10 in the Washington office, consulting with Bureau officials and preparing reports.

On February 21 F. T. Cowan, of the Billings, Mont., laboratory, attended a meeting held at Fort Collins, Colo., to discuss control of the Mormon cricket.

C. M. Packard of Lafayette, Ind., J. R. Horton of Wichita, Kans., and C. C. Hill and H. D. Smith of the field laboratory at Carlisle, Pa., were in Washington February 23 to 28 in consultation with Bureau officials regarding various phases of the work on the Hessian fly.

BEE CULTURE INVESTIGATIONS

James I. Hambleton, Apiculturist, in Charge

At the recent convention of the American Honey Producers' League held at San Francisco January 24 to 27, an announcement was made of the election of E. L. Sechrist as Secretary-Treasurer of the League for the ensuing year. Mr. Sechrist, however, decided that he would have to decline the position because of pressure of official work, and therefore submitted his resignation.

Frank C. Fellett, Associate Editor of the American Bee Journal, Hamilton, Ill., called at the Bee Culture Laboratory February 25 to confer with the various members of the staff, and inform himself as to the researches being conducted.

Dr. W. W. Alpatov, of the University of Moscow, visited the Bee Culture Laboratory on February 18 to discuss with members of the staff some phases of the problem on which he is working at Johns Hopkins University, dealing with variation in the honeybee.

LIBRARY

Mabel Concord, Librarian

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. . . Oil sprays -- their use and effectiveness in control of fruit-tree leafroller, oyster-shell scale, and blister-mite (under interior conditions of B. C.). 11 p. Victoria, B. C., C. F. Banfield, 1927. (British Columbia Dept. Agr. Hort. Branch Circ. 68 (New Hort. Ser.).)

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Notes on the habits and distribution of some North Australian Culicidae. 40 p., illus. Melbourne, Albert J. Mullett, 1922. (Australia Dept. of Health. Service Pub. 21.)

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The common coffee mealy-bug (*Pseudococcus lilacinus* Ckll.) in Kenya Colony. 110 p., 4 pl. Nairobi, Government Printer, 1927. (Kenya Colony [Dept. Agr.] Bul. 18?)

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Notes on Australian mosquitoes (Diptera, Culicidae) Part ii. The zoogeography of the subgenus *Ochlerotatus*, with notes on the species. Linn. Soc. N. S. Wales Proc. 1927, v. 52, pt. 3, No. 212, p. 284-298. (References, p. 298.)
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Marine borers and their relation to marine construction on the Pacific coast, being the final report, prepared under the direction of the San Francisco Bay Marine Piling Committee, cooperating with the National Research Council and the American Wood-Preservers' Association, C. A. Hill and C. A. Kofoid, editors-in-chief. 257 p., illus. San Francisco, pub. by the committee, 1927. (Literature cited p. 338-343.)
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- Wisehart, M. K.
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